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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/360,060	07/23/1999	DAVID KONETSKI	M-7491-US	3630
27683	7590	01/18/2005	EXAMINER	
HAYNES AND BOONE, LLP 901 MAIN STREET, SUITE 3100 DALLAS, TX 75202			MEI, XU	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/360,060

Applicant(s)

KONETSKI ET AL.

Examiner

Xu Mei

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-10,12,14-18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-10,12,14-18 and 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

**DETAILED ACTION**

1. This communication is responsive to the applicant's amendment dated 11/05/2003.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haigler (US-4,887,298) or Cullison et al (US-4,296,278, hereafter, Cullison) in view of Suzuki et al (US-4,694,498, hereafter, Suzuki).

Regarding claim 1, Haigler discloses a speaker system (Figs. 2-4), comprising at least one transducer (16a); at least one speaker analog circuit (14a); and a diagnostic circuit (12) coupled to at least one transducer and the at least one speaker analog circuit. And Cullison discloses the circuit limitations or elements for the speaker protection circuit in claims 1 as

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shown in Figs 1, 3-4. What's not show by Haigler or Cullison is the diagnostics circuit for generating at least one test signal to the analog circuit and to an analog activity sensor that sample the test signal before and after transmission to the speaker analog circuit.

Suzuki discloses an automatic sound field correction circuit in the same field of endeavor including a diagnostics circuit for generating at least one test signal (pink noise generation unit) to the analog circuit and to an analog activity sensor that sample the test signal before and after transmission to the speaker analog circuit (see Figs. 1 and 5) for the purpose of permitting desired reproduction of audio signals by automatically adjusting frequency characteristic of a sound field (col. 1, lines 27-52).

It would have been obvious to one of ordinary skill in the art to modifies the speaker system of Cullison or Haigler with a sound field correction circuit of Suzuki by including a diagnostics circuit for generating at least one test signal (pink noise generation unit) to the analog circuit and to an analog activity sensor that sample the test signal before and after transmission to the speaker analog circuit (see Figs. 1 and 5) in order to permitting desired reproduction of audio

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signals by automatically adjusting frequency characteristic of a sound field.

Regarding claims 2-6 and 8, Haigler discloses the detailed descriptions in Figs. 2-4 in col. 6-17 and shows the claimed analog diagnostic circuit components such as rectifier (110); ac power test indicator (sense line threshold detector circuit); diagnostic mode activation mechanism (mute control circuit); analog activity sensor and indicator (signal sample threshold detector and LED 222); transistor (240, 280, 282); and comparator (190). And Collusion also shows the circuit limitations or elements for the speaker protection circuit in claims 2-6 and 8 in Figs 1, 3-4.

4. Claims 12, 14-18 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haigler or Cullison in view of Suzuki as discussed in claim 1 above and further in view of Soutar (US-5,644,505).

Regarding claims 12, 14-18 and 20-22, the combinations of Haigler or Cullison in view of Suzuki disclosed the speaker diagnostic system as discussed above. The claimed limitations of 12-23 with regard to the analog circuitries are substantially the same as recited in claims 1-6, 8-10. The different between claims 1-6, 8-10 and claims 12, 14-18 and 20-22 is a computer

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system including a processor and memory is connecting or coupling to the speaker diagnostic system, and the combinations of Haigler or Cullison with Suzuki fails to disclose this point.

Soutar discloses an universal audio analyzer (Fig. 1) including a computer 14 with a processor and memory in the same field of endeavor for analyzing audio device for the advantage of quickly obtain results according to standard test specifications (see Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modifies the speaker diagnostic system of Haigler or Cullison and Suzuki with the up-to-dated computer technology as shown by Soutar for providing standard test specification for diagnostic speaker in order to obtain quick and more accurate speaker diagnostic results thus to improve speaker protection.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this


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action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xu Mei whose telephone number is 703-308-6610. The examiner can normally be reached on Monday-Friday (9:30-6:00), alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Xu Mei  
Primary Examiner  
Art Unit 2644  
4/11/05